



blueprism®

SECTION 3

ACTIVITY SHEET

FOUNDATION TRAINING GUIDE

Suitable for Blue Prism version 6.2 or greater



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Section 3 Activity Sheet

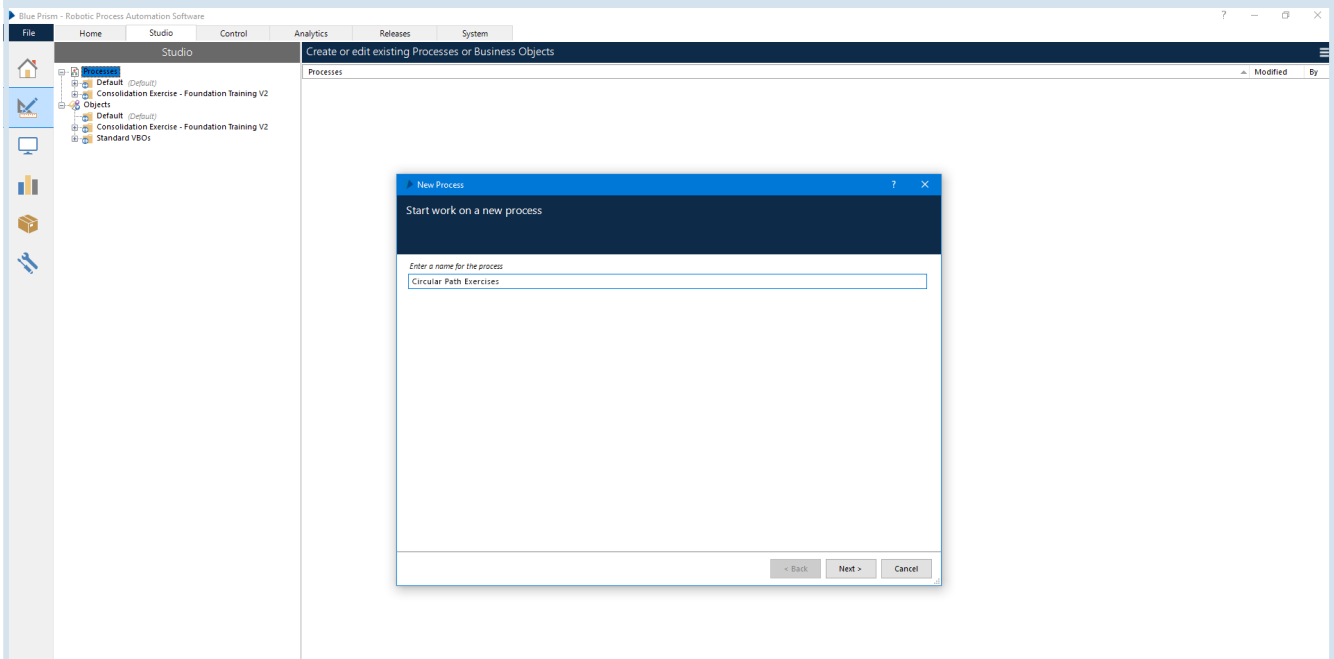
The Foundation Training journey continues with Process Flow. In this section, you will extend your understanding of Blue Prism Process development within Process Studio, by moving away from the linear diagram structure you have previously been using. And by learning how to use new Stages that enable the use of common logical structures such as Circular Paths and Loops.

SECTION 3 ACTIVITY 1

Video 3.1

Create a new Process.

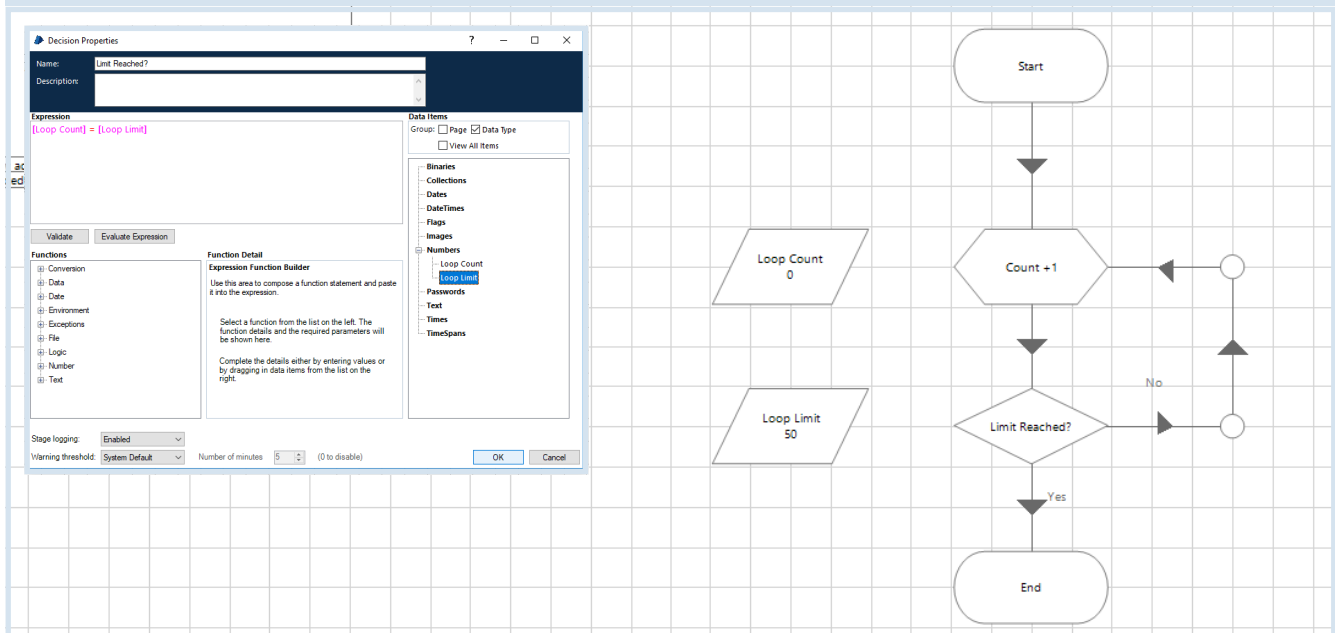
- *Right-click* on the *Processes* heading in the Studio Area of Blue Prism and select *Create Process* from the menu.
- Give your Process a name - *Circular Path Exercises* - and enter a brief description of what it does.
- The new Process created will appear beneath the Processes heading. *Double-click* to open it.



In this activity, you will combine all the Stages that were introduced in the previous sections to create a Circular Path. You will also learn to control the number of times the Process flows around the Circular Path, to prevent this cycle going around forever in an infinite loop and ensure the Process can progress to the End Stage.

Combine Data Items, a Calculation Stage and a Decision Stage to create a Circular Path.

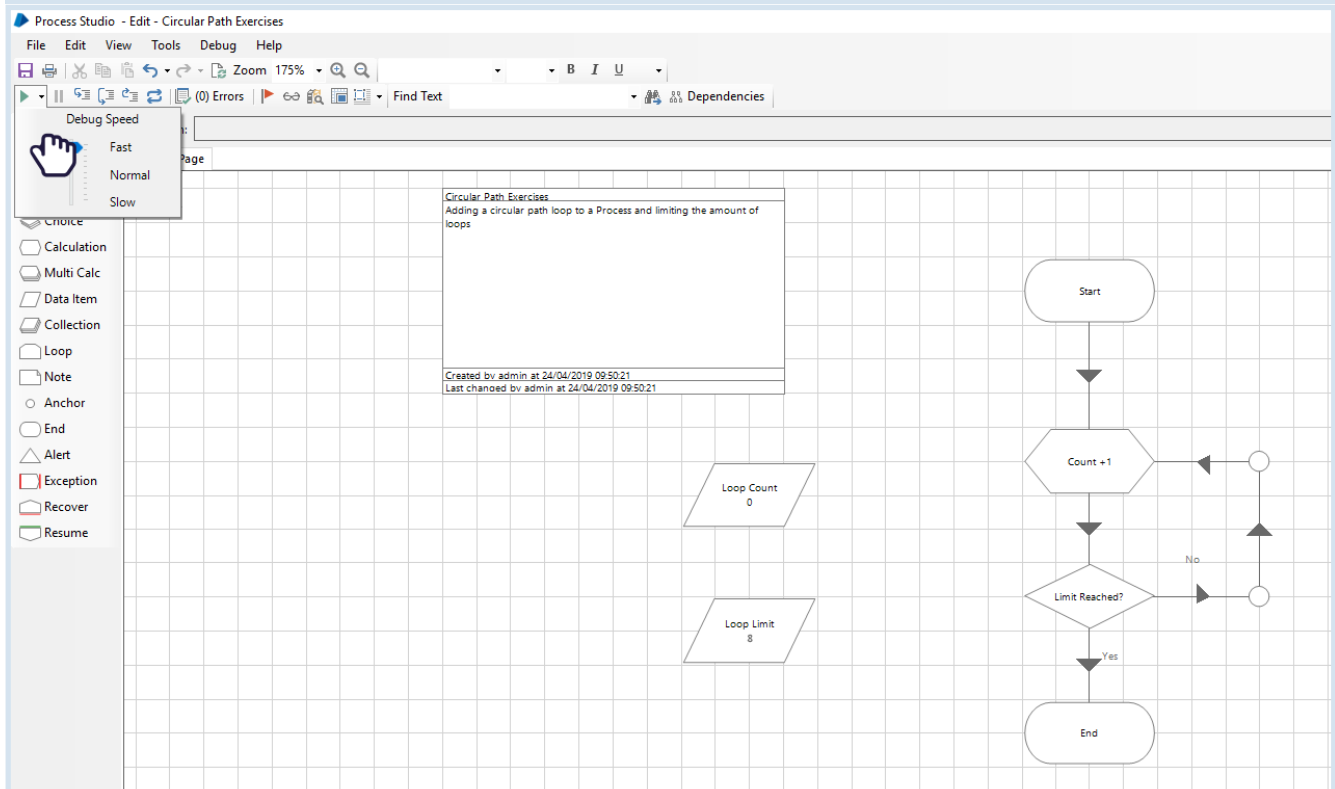
- Add two Data Items to the workspace.
- The first Data Item should be named *Loop Count* and assigned a *Number* Data Type with an Initial Value of *0*.
- The second Data Item should be named *Loop Limit* and assigned a *Number* Data Type with an Initial Value of *5*.
- Add a Calculation Stage to the Process Diagram that will increase the value stored in the *Loop Count* Data Item by *1*, each time the Process flows through it. Write an Expression that adds *1* to the *Loop Count* Data Item value and stores the new value back in the *Loop Count* Data Item $[Loop\ Count] + 1$.
- Add a Decision Stage between the Calculation Stage and the End Stage and name it *Limit Reached?* Then write an Expression to determine whether the *Loop Count* value is equal to the value stored within the *Loop Limit* Data Item $[Loop\ Count] = [Loop\ Limit]$.
- Use the Anchor Stage and the Link Tool to create a Circular Path for your Process flow.
- Click *Reset* to check for errors, then press *Go* to watch the Process loop around the Circular Path. You should see the *Loop Count* increase by *1*, with each flow around the path, until it reaches the *Loop Limit*.



In this activity you will learn how to pause, resume and change the running speed of a Process. You will also use 'Set Next Stage' and 'Breakpoints' to target specific parts of a Process.

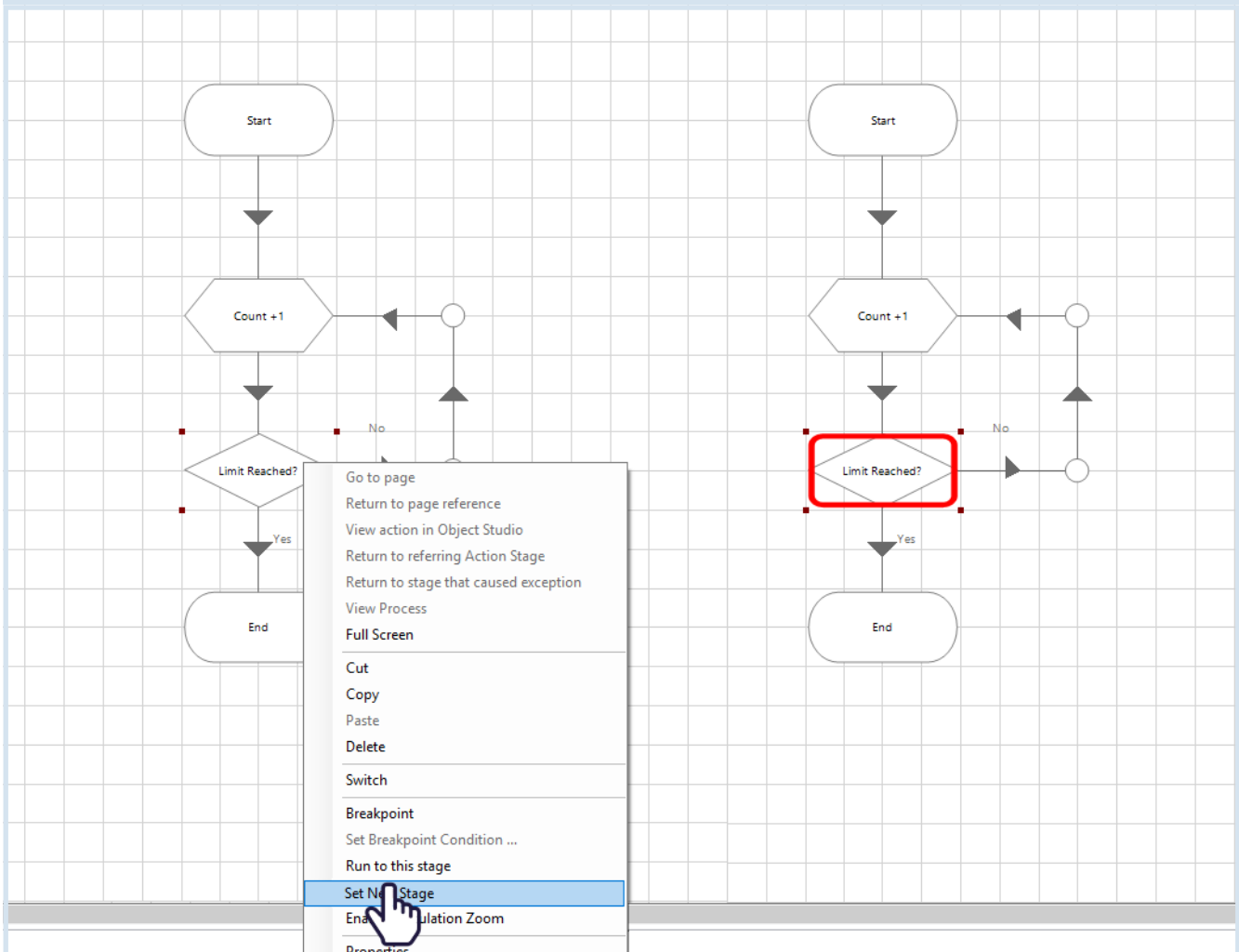
Pause, resume and change the running speed of a Process.

- For this activity, you'll be working in the *Circular Path Exercises* Process.
- Experiment with changing the running speed of the Process, by adjusting the drop-down slider in the playbar, then clicking *Go*.
- Pause the running Process by clicking the *Pause* button.
- Resume the Process by clicking *Go*.



Use Set Next Stage to skip to a specific Stage within the Process and run from there. Use a Breakpoint to control which Stage the Process pauses on when run.

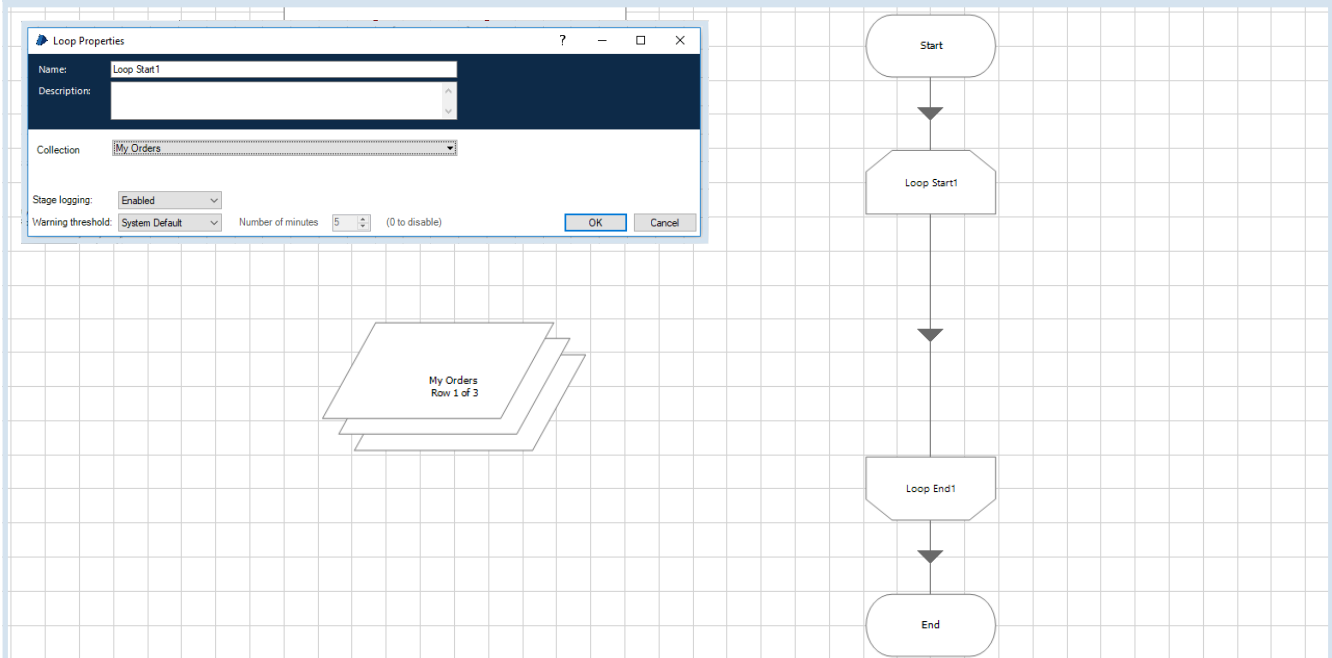
- Pause the Process, *right-click* on a Stage and select *Set Next Stage*.
- Click *Go* to watch the Process skip to the selected Stage and run from there.
- Pause the Process, *right-click* on a Stage and select *Breakpoint*.
- Resume the Process by clicking *Go* and watch the Process run up to the selected Stage and then pause.



In this activity, you will use a Loop Stage to work through the data stored within a Collection Stage. You will also use a Calculation Stage to add the *Quantity* value of each order in the Collection Stage and store the total value in a Data Item.

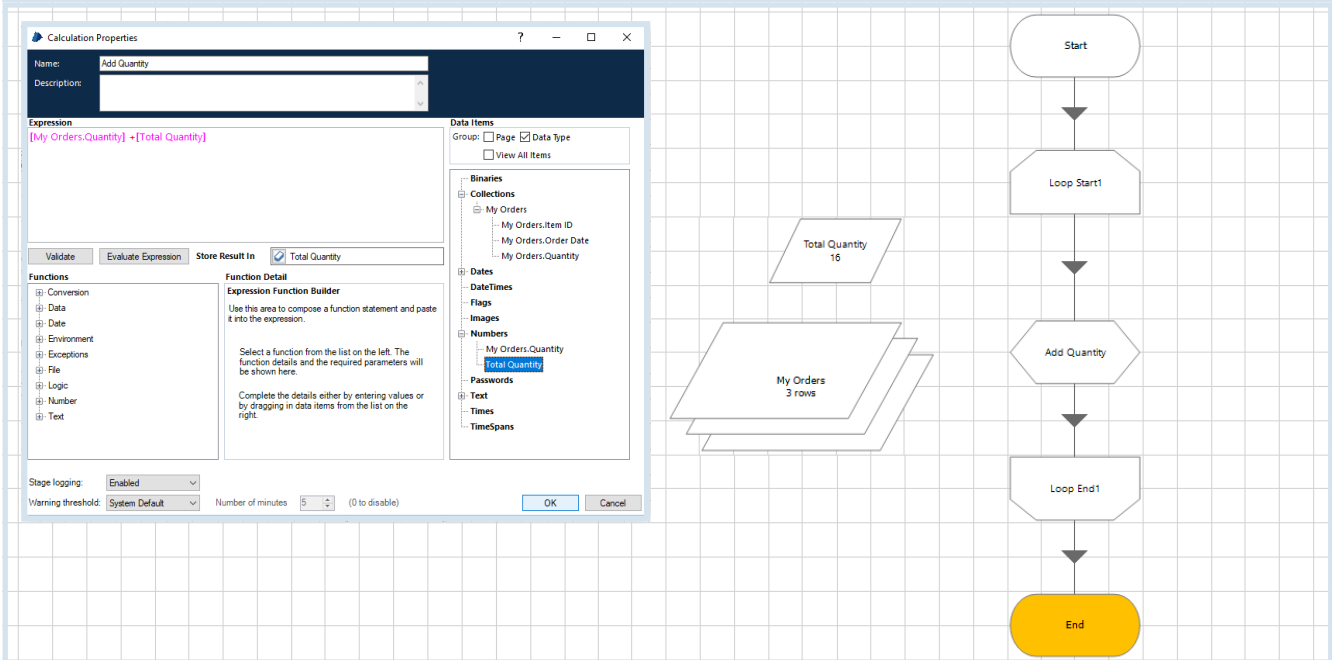
Use a Loop Stage to work through the data stored within a Collection Stage.

- Open the example Process named *Collection Example*.
- Open the *My Orders* Collection Stage properties window.
- Select the *Initial Values* tab to view the stored Data values.
- Add a Loop Stage to the Process Diagram.
- Open the Loop Start properties window.
- From the Collection drop-down menu, select the *My Orders* Collection and press *Ok*.
- Link up the Stages and click *Reset* then *Go*, to watch the Process flow loop through the data in the *My Orders* Collection, the row number will update with each loop.



Use a Calculation Stage to add the *Quantity* Value of each order within the Collection Stage and a Data Item to store the *Total Quantity*.

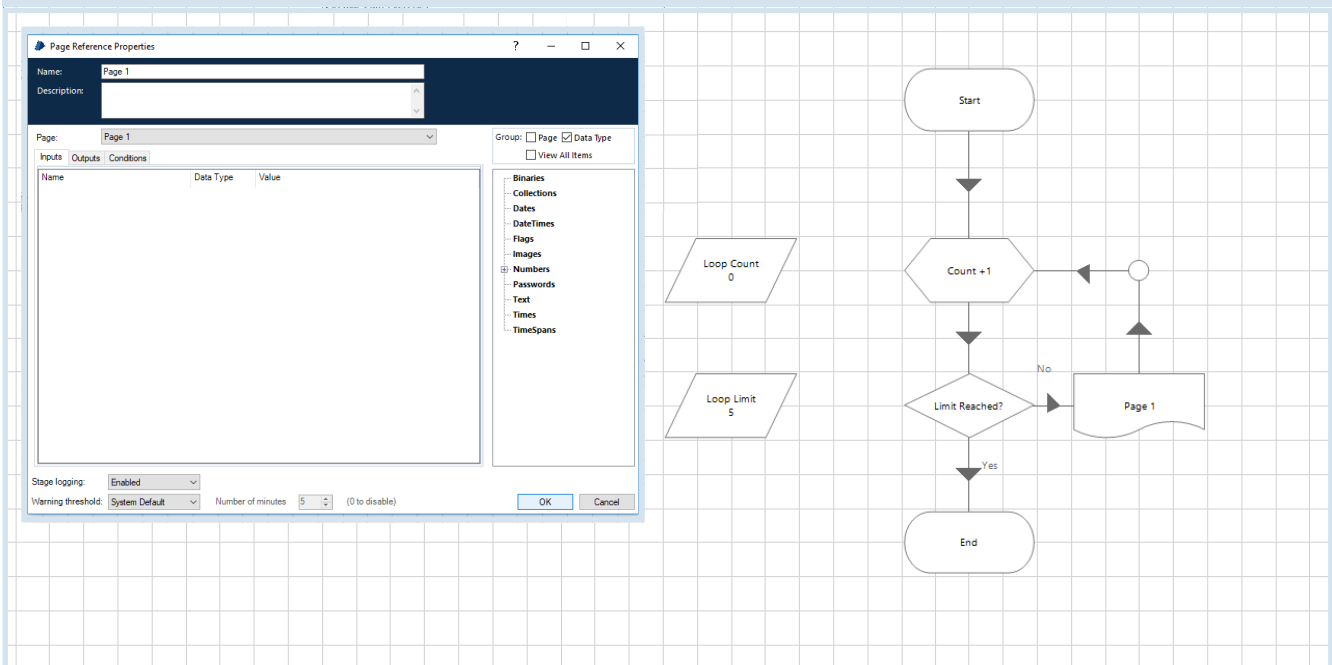
- Add a Data Item named *Total Quantity* with a *Number* Data Type set to an Initial Value of *0*.
- Add a Calculation Stage in between the Loop Start and Loop End Stages and link them all together.
- Give the Calculation Stage a name - *Add Quantity* - and create an Expression to calculate the total quantity of items *[My Orders.Quantity] + [Total Quantity]* and Store Result In *[Total Quantity]*.
- Press *Reset* and *Go*, to watch the Process work through the three rows of data - adding each *Quantity* value to the *Total Quantity*, until all of the rows have been processed.



In this activity, you will learn how to add, delete and organize Pages within your Process. You will also learn how to use the Page Reference Stage to control movement between the Pages within a Process.

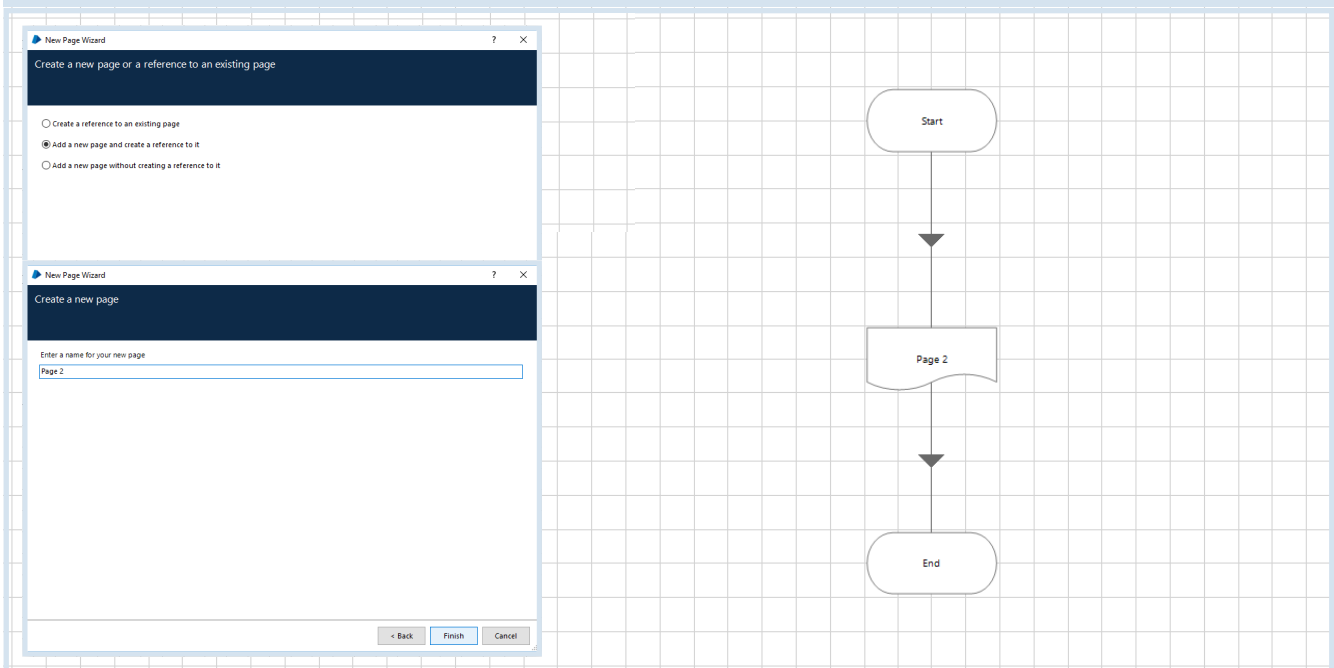
Add and organize Pages within your Process.

- For this activity, you'll be working in the *Circular Path Exercises* Process.
- *Right-click* on the Main Page tab at the top of your workspace and select *New*.
- Give your new Page a name – *Page 1*.
- Within your new Page, link up the Start and End Stages and return to the Main Page.
- Add a Page Reference Stage to your Process Diagram.
- Select *Create a reference to an existing Page*, then select *Page 1*.
- Link your Page Reference Stage to the rest of your Process Diagram.
- Click *Reset* then *Go*, to watch your Process flow from the Main Page to *Page 1* and back again.



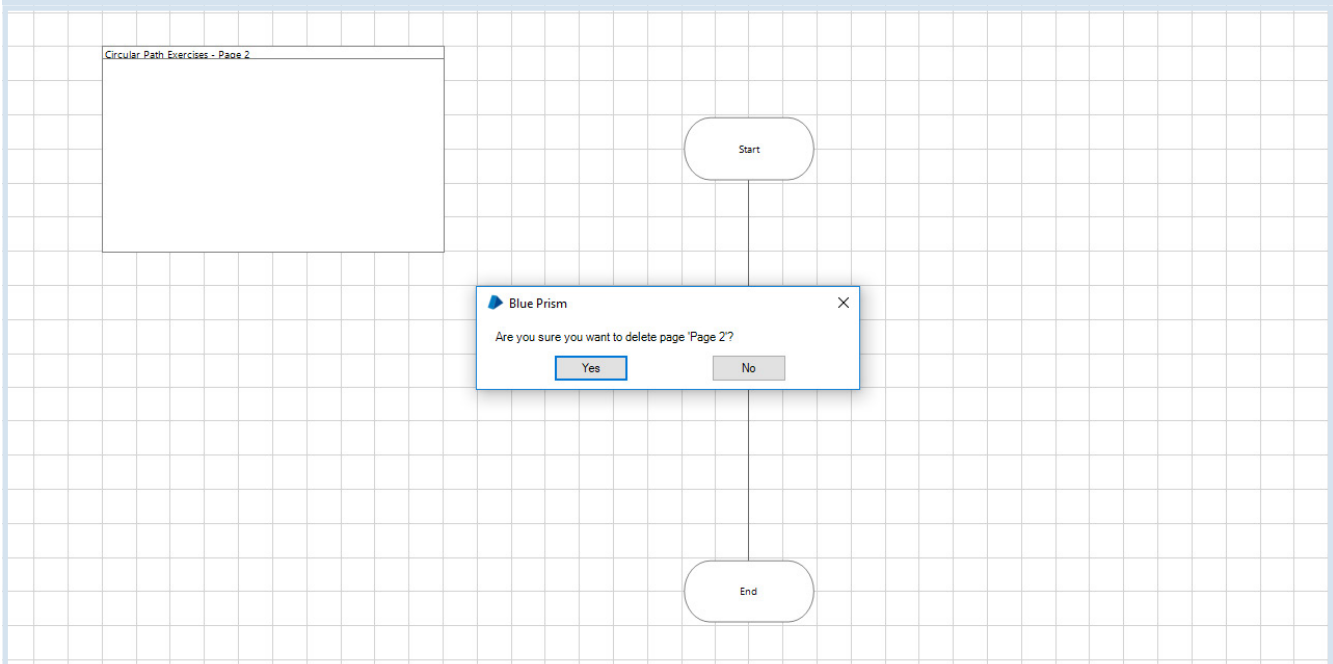
Add a second Page to your Process and make a Reference to it from *Page 1*.

- Create a new Page – *Page 2* and make a Reference to it in *Page 1*.
- Link the Page Reference Stage to the Start and End Stages.
- Return to the Main Page, reset and run the Process to watch it flow down through the Sub-Pages and back up again.



Delete a Page within your Process and reflect upon the results.

- *Right-click* on the *Page 2* tab and select *Delete*.
- In *Page 1* – open the Page Reference Stage properties to see that the reference is now *None*. This means the Page Reference Stage has been orphaned.
- *Delete* the orphaned Page Reference Stage on *Page 1* and link the Start Stage and the End Stage together.



Transfer logic built within one Page onto a Sub-Page.

- On the Main Page move the Page Reference Stage to the side and draw a selection box around all of the Stages on the Page, excluding the Start Stage, End Stage and Page Reference Stage.
- *Cut* the selection from the Main Page – using *Edit > Cut*, *CTRL X*, or the scissors button.
- *Paste* the selection into *Page 1* and re-link all the Stages.
- Link the Start Stage, End Stage and Page Reference Stage on the Main Page, then reset and run the Process to observe the results.

